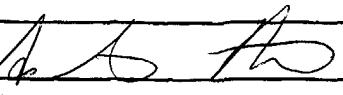


| Form PTO-1449   |          | Docket Number 416272061200   |              | Application Number 09/972,805 |       |          |                            |
|---|----------|--|--------------|-------------------------------|-------|----------|----------------------------|
| INFORMATION DISCLOSURE CITATION<br>IN AN APPLICATION<br><i>(Use several sheets if necessary)</i>  |          | Applicant<br>Vivki L. CHANDLER et al.  |              |                               |       |          |                            |
|   |          | Filing Date October 5, 2001  |              | Group Art Unit 1638           |       |          |                            |
|   |          | Mailing Date July 2, 2003  |              |                               |       |          |                            |
| <br><b>U.S. PATENT DOCUMENTS</b>   |          |  |              |                               |       |          |                            |
| Examiner Initials   | Ref. No. | Date   | Document No. | Name                          | Class | Subclass | Filing Date If Appropriate |
|   |          |  |              |                               |       |          |                            |
| <b>FOREIGN PATENT DOCUMENTS</b>   |          |  |              |                               |       |          |                            |
| Examiner Initials   | Ref. No. | Date   | Document No. | Country                       | Class | Subclass | Translation YES NO         |
| AM  | 1.       | 11/18/1999   | WO 99/58659  | WIPO                          | C/2N  | 15/00    | — —                        |
| <b>OTHER DOCUMENTS</b> <i>(including author, title, Date, Pertinent Pages, Etc.)</i>  |          |  |              |                               |       |          |                            |
| Examiner Initials   | Ref. No. | Title  |              |                               |       |          |                            |
| AM  | 2.       | De Wilde, Chris et al. (2000) "Plants as bioreactors for protein production: Avoiding the problem of transgene silencing" <i>Plant Molecular Biology</i> 43 (2-3): 347-359.  |              |                               |       |          |                            |
| AM  | 3.       | Lakshminarayan, Iyer M. et al. (2000) "Transgene silencing in monocots" <i>Plant Molecular Biology</i> 43 (2-3): 323-346.  |              |                               |       |          |                            |
| AM  | 4.       | Scheid, Ortrun Mittelsten et al. (2000) "Transcriptional gene silencing mutants" <i>Plant Molecular Biology</i> 43 (2-3): 235-241.   |              |                               |       |          |                            |
| AM  | 5.       | Walbot, Virginia (2001) "Imprinting of R-r paramutation of B-1 and Pl, and epigenetic silencing of MuDR/Mu transposons in Zea mays L. are coordinately affected by inbred background" <i>Genetical Research</i> 77 (3): 219-226. |              |                               |       |          |                            |
| <b>EXAMINER:</b>  <b>DATE CONSIDERED:</b>                                 |          |  |              |                               |       |          |                            |
| <b>EXAMINER:</b> Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. |          |  |              |                               |       |          |                            |

|  |  |                                  |                                   |
|--|--|----------------------------------|-----------------------------------|
| Form PTO-1449  |  | Docket Number 416272061200       | Application Number To Be Assigned |
| INFORMATION DISCLOSURE CITATION<br>IN AN APPLICATION |  | Applicant<br>V. Chandler, et al. |                                   |
| (Use several sheets if necessary)                    |  | Filing Date Herewith             | Group Art Unit To Be Assigned     |
|  |  | Mailing Date October 5, 2001     |                                   |

## U.S. PATENT DOCUMENTS

| Examiner Initials | Ref. No. | Date | Document No. | Name | Class | Subclass | Filing Date If Appropriate |
|-------------------|----------|------|--------------|------|-------|----------|----------------------------|
|                   |          |      |              |      |       |          |                            |

## FOREIGN PATENT DOCUMENTS

| Examiner Initials | Ref. No. | Date | Document No. | Country | Class | Subclass | Translation YES NO |
|-------------------|----------|------|--------------|---------|-------|----------|--------------------|
|                   |          |      |              |         |       |          |                    |

## OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

| Examiner Initials | Ref. No. | Title  |
|-------------------|----------|--|
| AM                | 1.       | Amedeo, P. et al. "Disruption of the plant gene <i>MOM</i> releases transcriptional silencing of methylated genes" <i>Nature</i> 405 (2000): 203-206.  |
| AM                | 2.       | Chandler, V. L. "Paramutation: Allelic Interactions that Cause Heritable Changes in Transcription", <i>Molecular Biology Meeting (Abstract)</i> , Queenstown, New Zealand (August 1998).   |
| AM                | 3.       | Chandler, V. L. "Epigenetic Control of Gene Expression in Plants", <i>Symposium: Plant Physiology 2000 and Beyond: Breaking the Mold (Abstract #30002)</i> , Providence, Rhode Island (July 23, 2001).   |
| AM                | 4.       | Chandler, V. L. and K. J. Hardeman. "The <i>Mu</i> Elements of <i>Zea mays</i> " <i>Adv. Genetics</i> 30 (1992): 77-122.   |
| AM                | 5.       | Chandler, V. L. and H. Vaucheret. "Gene Activation and Gene Silencing" <i>Plant Physiol.</i> 125 (2001): 145-8.  |
| AM                | 6.       | Chandler, V. L. and V. Walbot. "DNA modification of a maize transposable element correlates with loss of activity" <i>Proc. Natl. Acad. Sci. USA</i> 83 (1986): 1767-71.   |
| AM                | 7.       | Chandler, V. L. et al. "Paramutation: Allelic Interactions that Cause Heritable Changes in Transcription", <i>Abstracts of papers presented at the EMBO Workshop on "Chromatin and Epigenetic Regulation"</i> , Heidelberg (October 4-7, 1997): 41.                |
| AM                | 8.       | Chandler, V. L. et al. "Paramutation in maize" <i>Plant Mol. Biol.</i> 43 (2000): 121-145.   |
| AM                | 9.       | Chandler, V. L. et al. "b and p1 Paramutation in Maize: Heritable Transcription States Programmed during Development", <i>Epigenetic Mechanisms of Gene Regulation</i> , V.E.A. Russo et al. eds. (New York: Cold Spring Harbor Laboratory Press) (1996): 289-304. |

EXAMINER:

DATE CONSIDERED:

6/7/04

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

|  |  |  |                                  |                                   |
|--|--|--|----------------------------------|-----------------------------------|
| Form PTO-1449  |  |  | Docket Number 416272061200       | Application Number To Be Assigned |
| INFORMATION DISCLOSURE CITATION<br>IN AN APPLICATION<br><i>(Use several sheets if necessary)</i>   |  |  | Applicant<br>V. Chandler, et al. |                                   |
|  |  |  | Filing Date Herewith             | Group Art Unit To Be Assigned     |
|  |  |  | Mailing Date October 5, 2001     |                                   |
| <p>10. Chandler, V. L. et al. "Mutants that prevent paramutation also affect other types of epigenetic silencing" <i>46th International NIBB Conference, Genetics &amp; Epigenetics, 1st 100 years</i>: March 6-10, 2001, Abstract.</p> <p>11. Chomet, P. et al. "Identification of a Regulatory Transposon That Controls the <i>Mutator</i> Transposable Element System in Maize" <i>Genetics</i> 129 (1991): 261-70.</p> <p>12. Cogoni, C. and G. Macino. "Isolation of quelling-defective (<i>qde</i>) mutants impaired in posttranscriptional transgene-induced gene silencing in <i>Neurospora crassa</i>" <i>Proc. Natl. Acad. Sci. USA</i> 94 (1997): 10233-10238.</p> <p>13. Dalmas, T. et al. "An RNA-Dependent RNA Polymerase Gene in <i>Arabidopsis</i> is Required for Posttranscriptional Gene Silencing Mediated by a Transgene but Not by a Virus" <i>Cell</i> 101 (2000): 543-553.</p> <p>14. Dalmas, T. et al. "SDE3 encodes an RNA helicase required for post-transcriptional gene silencing in <i>Arabidopsis</i>" <i>EMBO J.</i> 20 (2001): 2069-2077.</p> <p>15. Dorweiler, J. E. et al. "Analysis of Paramutation at the <i>b</i> Locus of Maize" <i>39th Annual Maize Genetics Conference Program and Abstracts</i>, Clearwater Beach, FL (March 13-16, 1997); 36.</p> <p>16. Dorweiler, J. E. et al. "Mutations that Affect Paramutation and Correlations with Chromatin Structure" <i>40th Annual Maize Genetics Conference Program and Abstracts</i>, Lake Geneva, WI (March 19-22, 1998); 7.</p> <p>17. Dorweiler, J. E. et al. "Mediator of Paramutation2 is a dominant inhibitor of the establishment of paramutation" <i>42nd Annual Maize Genetics Conference Program and Abstracts</i>, Coeur D'Alene, ID (March 16-19, 2000); 97.</p> <p>18. Dorweiler, J. E. et al. "mediator of paramutation1 Is Required for Establishment and Maintenance of Paramutation at Multiple Maize Loci" <i>Plant Cell</i> 12 (2000): 2101-2118.</p> <p>19. Fagard, M. et al. "AGO1, QDE-2, and RDE-1 are related proteins required for post-transcriptional gene silencing in plants, quelling in fungi, and RNA interference in animals" <i>Proc. Natl. Acad. Sci. USA</i> 97 (2000): 11650-11654.</p> <p>20. Fagard, M. and H. Vaucheret. "(Trans)Gene Silencing in Plants: How Many Mechanisms?" <i>Annu. Rev. Plant Physiol. Plant Mol. Biol.</i> 51 (2000): 167-194.</p> <p>21. Finnegan, E. J. et al. "Reduced DNA methylation in <i>Arabidopsis thaliana</i> results in abnormal plant development" <i>Proc. Natl. Acad. Sci. USA</i> 93 (1996): 8449-8454.</p> <p>22. Turner, I. J. et al. "Gene Silencing and Homology-Dependent Gene Silencing in <i>Arabidopsis</i>: Genetic Modifiers and DNA Methylation" <i>Genetics</i> 149 (1998): 651-662.</p> <p>23. Gibbons, R. J. et al. "Mutations in <i>ATRX</i>, encoding a SWI/SNF-like protein, cause diverse changes in the pattern of DNA methylation" <i>Nat. Genet.</i> 24 (2000): 368-371.</p> <p>24. Goff, S. A. et al. "Functional analysis of the transcriptional activator encoded by the maize B gene: evidence for a direct functional interaction between two classes of regulatory proteins" <i>Genes &amp; Dev.</i> 6 (1992): 864-875.</p> |  |  |                                  |                                   |

EXAMINER:

DATE CONSIDERED:

6/17/04

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

|  |  |                                  |                                   |
|--|--|----------------------------------|-----------------------------------|
| Form PTO-1449  |  | Docket Number 416272061200       | Application Number To Be Assigned |
| INFORMATION DISCLOSURE CITATION<br>IN AN APPLICATION<br><i>(Use several sheets if necessary)</i> |  | Applicant<br>V. Chandler, et al. |                                   |
|  |  | Filing Date Herewith             | Group Art Unit To Be Assigned     |
|  |  | Mailing Date October 5, 2001     |                                   |

|     |  |
|-----|--|
| 25. | Goff, S. A. et al. "Transactivation of anthocyanin biosynthetic genes following transfer of <i>B</i> regulatory genes into maize tissues" <i>EMBO J.</i> 9 (1990): 2517-2522.  |
| 26. | Henikoff, S. and L. Comai. "Trans-Sensing Effects: The Ups and Downs of Being Together" <i>Cell</i> 93 (1998): 329-332.  |
| 27. | Hollick, J. B. "The <i>rnr6</i> locus affects <i>pl</i> paramutation and plant development" <i>41st Annual Maize Genetics Conference Program and Abstracts</i> , Lake Geneva, WI (March 11-14, 1999): 56.                              |
| 28. | Hollick, J. B. "Genetic components required for paramutation at the <i>pl1</i> locus" <i>43rd Annual Maize Genetics Conference Program and Abstracts</i> , Lake Geneva, WI (March 14-18, 2001): 86.                                    |
| 29. | Hollick, J. B. and V. L. Chandler. "Genetic Factors Required to Maintain Repression of a Paramutagenic Maize <i>pl1</i> Allele" <i>Genetics</i> 157 (2001): 369-378.   |
| 30. | Hollick, J. B. and V. L. Chandler. "Epigenetic Allelic States of a Maize Transcriptional Regulatory Locus Exhibit Overdominant Gene Action" <i>Genetics</i> 150 (1998): 891-897.   |
| 31. | Hollick, J. B. and V. L. Chandler. "Genetic Factors Affecting Paramutant <i>pl</i> Alleles" <i>39th Annual Maize Genetics Conference Program and Abstracts</i> , Clearwater Beach, FL (March 13-16, 1997): 37.                         |
| 32. | Hollick, J. B. and V. L. Chandler. "Genetic Requirements for the Heritable Suppression of a Paramutable <i>pl</i> Allele" <i>40th Annual Maize Genetics Conference Program and Abstracts</i> , Lake Geneva, WI (March 19-22, 1998): 7. |
| 33. | Hollick, J. B. and M. P. Gordon. "A poplar tree proteinase inhibitor-like gene promoter is responsive to wounding in transgenic tobacco" <i>Plant Mol. Biol.</i> 22 (1993): 561-572.   |
| 34. | Hollick, J. B. and D. Lisch. "Diverse roles of required to maintain repression ( <i>rnr</i> ) factors in gene silencing" <i>42nd Annual Maize Genetics Conference Program and Abstracts</i> , Coeur D'Alene (March 16-19, 2000): 32.   |
| 35. | Hollick, J. B. et al. "Paramutation and related allelic interactions" <i>Trends Genet.</i> 13 (1997): 302-308.   |
| 36. | Hollick, J. B. et al. "Paramutation Alters Regulatory Control of the Maize <i>pl</i> Locus" <i>Genetics</i> 154 (2000): 1827-1838.   |
| 37. | Hollick, J. B. et al. "Allelic Interactions Heritably Alter the Activity of a Metastable Maize <i>pl</i> Allele" <i>Genetics</i> 141 (1995): 709-719.  |
| 38. | Holliday, R. et al. "Gene Silencing in Mammalian Cells", <u>Epigenetic Mechanisms of Gene Regulation</u> , V.E.A. Russo et al. eds. (New York: Cold Spring Harbor Laboratory Press) (1996): 47-59.                                     |
| 39. | Jeddeloh, J.A. et al. "Maintenance of genomic methylation requires a SWI2/SNF2-like protein" <i>Nature Genet.</i> 22 (1999): 94-97.  |
| 40. | Jones, L. et al. "RNA-directed transcriptional gene silencing in plants can be inherited independently of the RNA trigger and requires <i>Met1</i> for maintenance" <i>Curr. Biol.</i> 11 (2001): 747-757.                             |
| 41. | Jorgensen, R. A. "Cosuppression, Flower Color Patterns, and Metastable Gene Expression States" <i>Science</i> 268 (1995): 686-691.   |

EXAMINER:

DATE CONSIDERED:

6/17/04

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

|  |   |  |                                  |                                   |
|--|---|--|----------------------------------|-----------------------------------|
| Form PTO-1449  |   |  | Docket Number 416272061200       | Application Number To Be Assigned |
| INFORMATION DISCLOSURE CITATION<br>IN AN APPLICATION<br><i>(Use several sheets if necessary)</i> |   |  | Applicant<br>V. Chandler, et al. |                                   |
|  |   |  | Filing Date Herewith             | Group Art Unit To Be Assigned     |
|  |   |  | Mailing Date October 5, 2001     |                                   |
|  | 42.   | Kakutani, T. et al. "Developmental abnormalities and epimutations associated with DNA hypomethylation mutations" <i>Proc. Natl. Acad. Sci. USA</i> 93 (1996): 12406-12411.   |                                  |                                   |
|  | 43.   | Kakutani, T. et al. "Meiotically and Mitotically Stable Inheritance of DNA Hypomethylation Induced by <i>ddm1</i> Mutation of <i>Arabidopsis thaliana</i> " <i>Genetics</i> 151 (1999): 831-838.   |                                  |                                   |
|  | 44.   | Lisch, D. et al. "Genetic Characterization of the <i>Mutator</i> System in Maize: Behavior and Regulation of <i>Mu</i> Transposons in a Minimal Line" <i>Genetics</i> 139 (1995): 1777-96.   |                                  |                                   |
|  | 45.   | Lisch, D. et al. "Mutations that Affect Paramutations also Reverse Mu element Methylation" <i>42nd Annual Maize Genetics Conference Program and Abstracts</i> , Coeur D'Alene, ID (March 16-19, 2000): 21.   |                                  |                                   |
|  | 46.   | Lisch, D. and M. Freeling, "Loss of Mutator Activity in a Minimal Line" <i>Maydica</i> 39 (1994): 289-300.   |                                  |                                   |
|  | 47.   | Martienssen, R. A. "Epigenetic Silencing of <i>Mu</i> Transposable Elements in Maize", <u>Epigenetic Mechanisms of Gene Regulation</u> , Russo, V.E.A. et al. eds. (New York: Cold Spring Harbor Laboratory Press) (1996): 593-608.                                      |                                  |                                   |
|  | 48.   | Matzke, M. A. et al. "Paramutation and transgene silencing: a common response to invasive DNA?" <i>Trends Plant Sci.</i> 1 (1996): 382-388.  |                                  |                                   |
|  | 49.   | Mittelsten Scheid, O. et al. "Release of epigenetic gene silencing by trans-acting mutations in <i>Arabidopsis</i> " <i>Proc. Natl. Acad. Sci. USA</i> 95 (1998): 632-637.   |                                  |                                   |
|  | 50.   | Morel, J. B. and H. Vaucheret. "Post-transcriptional gene silencing mutants" <i>Plant Mol. Biol.</i> 43 (2000): 275-284.   |                                  |                                   |
|  | 51.   | Mourrain, P. et al. " <i>Arabidopsis</i> SGS2 and SGS3 Genes Are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance" <i>Cell</i> 101 (2000): 533-542.  |                                  |                                   |
|  | 52.   | Patterson, G. I. et al. "Genetic Analysis of <i>B-Peru</i> , a Regulatory Gene in Maize" <i>Genetics</i> 126 (1991): 205-220.  |                                  |                                   |
|  | 53.   | Patterson, G. I. et al. "Sequences Required for Paramutation of the Maize <i>b</i> Gene Map to a Region Containing the Promoter and Upstream Sequences" <i>Genetics</i> 140 (1995): 1389-1406.   |                                  |                                   |
|  | 54.   | Patterson, G. I. et al. "Paramutation, an Allelic Interaction, Is Associated With a Stable and Heritable Reduction of Transcription of the Maize <i>b</i> Regulatory Gene" <i>Genetics</i> 135 (1993): 881-894.  |                                  |                                   |
|  | 55.   | Radicella, J. P. et al. "Allelic diversity of the maize <i>B</i> regulatory gene: different leader and promoter sequences of two <i>B</i> alleles determine distinct tissue specificities of anthocyanin production" <i>Genes &amp; Development</i> 6 (1992): 2152-2164. |                                  |                                   |
|  | 56.   | Radicella, J. P. et al. "Cloning and nucleotide sequence of a cDNA encoding <i>B-Peru</i> , a regulatory protein of the anthocyanin pathway in maize" <i>Plant Mol. Biol.</i> 17 (1991): 127-130.  |                                  |                                   |
| 57.  | Selinger, D. A. and V. L. Chandler. " <i>B-Bolivia</i> , an allele of the Maize <i>b1</i> Gene with Variable Expression, Contains a High Copy Retrotransposon-Related Sequence Immediately Upstream" <i>Plant Physiol.</i> 125 (2001): 1363-79. |  |                                  |                                   |

EXAMINER:

DATE CONSIDERED:

6/7/04

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

|  |  |                                  |                                   |
|--|--|----------------------------------|-----------------------------------|
| Form PTO-1449  |  | Docket Number 416272061200       | Application Number To Be Assigned |
| INFORMATION DISCLOSURE CITATION<br>IN AN APPLICATION<br><i>(Use several sheets if necessary)</i> |  | Applicant<br>V. Chandler, et al. |                                   |
|  |  | Filing Date Herewith             | Group Art Unit To Be Assigned     |
|  |  | Mailing Date October 5, 2001     |                                   |

|           |     |  |
|-----------|-----|--|
| <i>AM</i> | 58. | Selinger, D. A. and V. L. Chandler. "Characterization of a tissue-specific gene silencing phenomenon involving <i>B-Bolivia</i> and CaMV 35S/B chimeric transgenes" <i>42nd Annual Maize Genetics Conference Program and Abstracts</i> , Coeur D'Alene, ID (March 16-19, 2000): 109. |
| <i>AM</i> | 59. | Selinger, D. A. et al. "The Maize Regulatory Gene <i>B-Peru</i> Contains a DNA Rearrangement That Specifies Tissue-Specific Expression Through Both Positive and Negative Promoter Elements" <i>Genetics</i> 149 (1998):1125-38.   |
| <i>AM</i> | 60. | Vaucheret, H. and M. Fagard. "Transcriptional gene silencing in plants: targets, inducers and regulators" <i>Trends Genet.</i> 17 (2001): 29-35.   |
| <i>AM</i> | 61. | Vongs, A. et al. " <i>Arabidopsis thaliana</i> DNA Methylation Mutants" <i>Science</i> 260 (1993): 1926-1928.  |

|                              |                         |
|------------------------------|-------------------------|
| EXAMINER: <i>[Signature]</i> | DATE CONSIDERED: 6/7/04 |
|------------------------------|-------------------------|

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.